



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**910093**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0103504</b>	GFL0098443	GFL0098453
Sample Date		Client Info		<b>28 Dec 2023</b>	05 Dec 2023	07 Nov 2023
Machine Age	hrs	Client Info		<b>7894</b>	7770	7634
Oil Age	hrs	Client Info		<b>899</b>	775	639
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>7</b>	3	3
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	<1	2
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

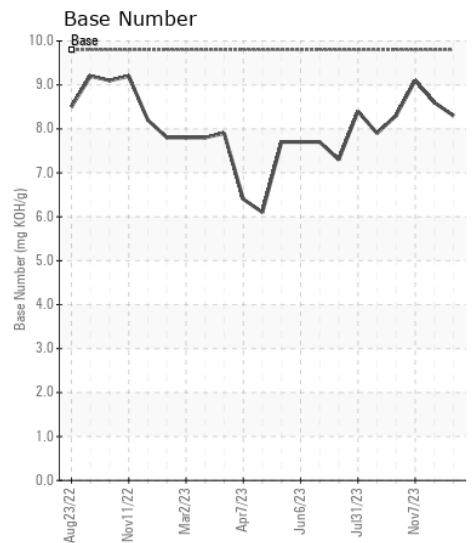
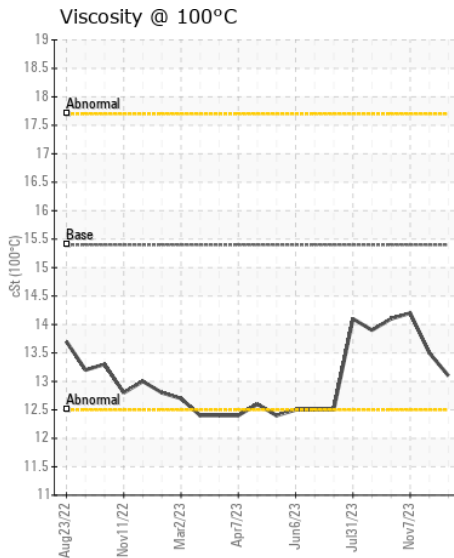
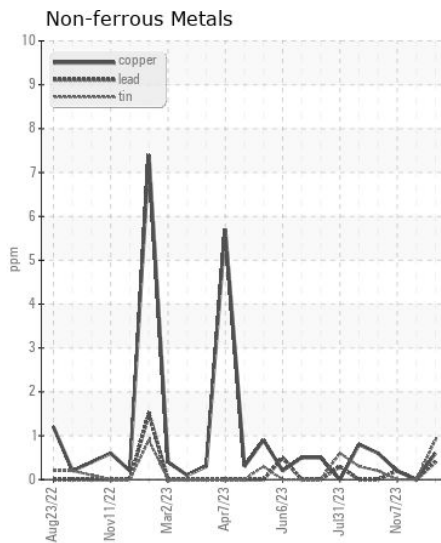
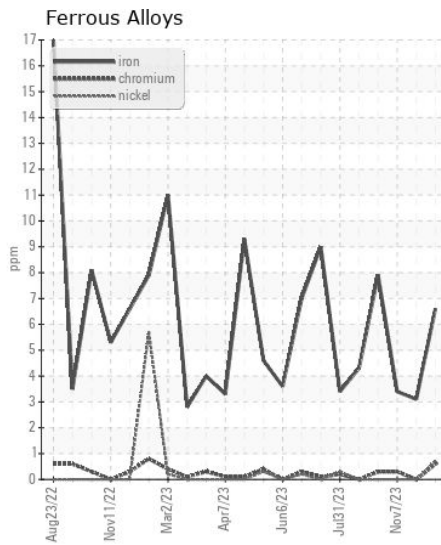
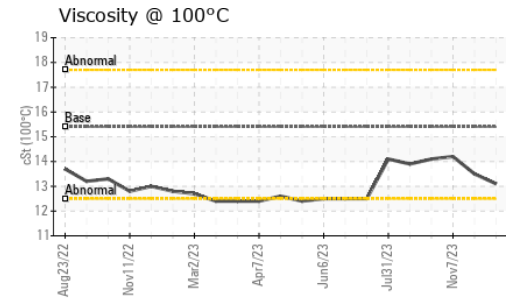
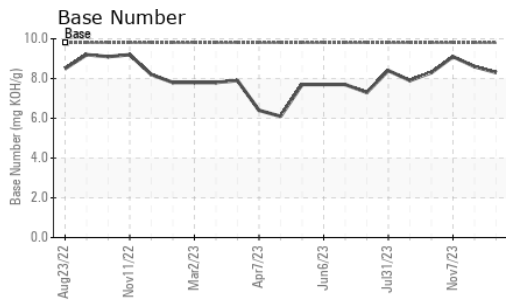
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	3	4
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.8</b>	6.0	5.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.4</b>	19.3	19.0
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	1	0
Boron	ppm	ASTM D5185m	0	<b>70</b>	87	107
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	6
Molybdenum	ppm	ASTM D5185m	60	<b>68</b>	62	74
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	1010	<b>802</b>	833	789
Calcium	ppm	ASTM D5185m	1070	<b>1088</b>	870	1106
Phosphorus	ppm	ASTM D5185m	1150	<b>815</b>	861	941
Zinc	ppm	ASTM D5185m	1270	<b>1088</b>	945	1059
Sulfur	ppm	ASTM D5185m	2060	<b>2952</b>	2780	3045
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.3</b>	14.2	13.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.3</b>	8.6	9.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.1</b>	13.5	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0103504 **Received** : 09 Jan 2024  
**Lab Number** : 06055144 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821093 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 180 - Tuscaloosa Hauling**  
 4701 12TH ST NE  
 Tuscaloosa, AL  
 US 35404  
 Contact: FREDERICK ROGERS  
 fred.rogers@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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F: